

The Madagascar Teal, a most enigmatic duck

By H. Glyn Young

Résumé: Depuis sa découverte en 1860, la Sarcelle de Bernier, *Anas bernieri*, espèce endémique de Madagascar en voie de disparition a été peu étudiée à l'état sauvage. Des enquête entreprises en 1993 en ont trouvé des petits nombres à des lacs dans le nord-ouest de Madagascar. Les résultats de ces enquête suggèrent que la population mondiale restante est de 100 à 500 oiseaux seulement. L'apparence de l'oiseau, ses origines, ses relations taxonomiques et les milleures chances d'observer les espèces sont examinées.

The Madagascar or Bernier's Teal *Anas bernieri* was first described in 1860, after which it disappeared again. Very few were seen by early European travellers and, more unusually, almost no specimens were collected. The thorough Franco-Anglo-Americaine expedition of 1929-1932 collected two specimens¹, although the leader A L Rand did not see it at all². Only one individual, a female, reached Europe alive, living several years from 1927 at Cleres, the collection of Jean Delacour².

It was not until 1970 that reasonable numbers of Madagascar Teal were found, in lakes north of Ambereny in western Madagascar³. This included 60 at Lac Masama³, a find that was even considered a re-discovery⁴. In 1973 a thorough survey of these lakes was conducted, leading to an estimated population of 120 at Lac Bemamba⁵.

After 1973 only a handful of further sightings of the teal was made, with no more attempts to survey the species or to assess population trends until 1992. In this year only 16 were found at Bemamba and none at Masama and at both lakes serious habitat modification was found⁶.

Distribution and status

Analysis of sub-fossil deposits has suggested that the teal was once widespread and common throughout Madagascar, even over the seriously degraded Central Plateau (L M A Rakotozafy, unpublished). The Madagascar Teal inhabits shallow, open unvegetated waters where it usually feeds by wading in a shelduck-like fashion. It often feeds in the company of Black-winged Stilt *Himantopus himantopus* and flamingos. The teal has also been seen on exposed sand-bars in large rivers, estuaries and the edges of mangrove forest. It is probable that the species is semi-nomadic, moving to different habitats with the seasons. No nests or young have been recorded.

The main crop in Madagascar is rice, and shallow water bodies throughout the country have been converted to rice production. Rice and teal are not

compatible and the duck is being forced out as rice is planted.



Map 1
Carte 1

The teal is now generally only known from waters that are saline for at least part of the year, and therefore unsuitable for rice production. Lac Antsamaka, south west of Ambereny, is a deep, lily-covered lake unsuitable for teal for several months after the rains. As the lake dries, salinity increases, the lilies die back and the teal arrives. Masama is deep and the water fresh, and rice is now produced at the edges, with the result that there are no teal. At the shallow Bemamba, teal are only found at the southern end, where salinity increases and the rice crop stops.

In June-July 1993 20-30 teal were found at the southern end of Bemamba⁶. A further 14 teal were found at Ankilytoaka, an area of flooded grassland in the north-western flood-plain of Bemamba. However, these teal disappeared as this area dried in July⁶. Survey work south of Ambereny in August 1993 found 46 teal in wetlands between these lakes and Morondava, giving an estimated population of 100-500 in the area between Antsalova and Morondava⁷. In June 1995 81 teal were seen in a coastal bay near Mahajanga (pers comm R Rabarisoa).

Records have been received from several other west coast sites. However, surveys of some lakes previously known to hold teal have found very few, if any, in recent years. Lac Kinkony held no teal in 1993, while singles have been seen at Ihotry and Tsimanampetsotsa. The Madagascar Teal is clearly endangered.

Origins and taxonomy

The Madagascar Teal is the westernmost representative of the austral teal, of which there are eight extant taxa - the Grey Teals *A. gibberifrons* (Indonesia), *A. gracilis* (Australasia), *A. albogularis* (Andaman Islands), Chestnut Teal *A. castanea* (Australia) and the Brown Teals *A. chlorotis*, *A. aucklandica*, and *A. nesiotis* (New Zealand)⁶. There are no austral teal in Africa, the nearest population to Madagascar is that in the Andaman Islands. However, *A. theodori* of Mauritius and Reunion was described as a 'gray teal' by early European visitors to these islands before it became extinct in the seventeenth century⁹.



Bernier's Teal *Anas bernieri*, Lac Bemamba, Madagascar
(UNESCO/Francois Busson)

Sarcelle de Bernier *Anas bernieri*, Lac Bemamba, Madagascar
(UNESCO/Francois Busson)

Identification

The Madagascar Teal is a long-necked, elegant duck with a uniform soft brown plumage. Sexes are similar. The bill is reddish, the legs are grey-brown and the eye large, bright and chestnut.

The underwing is grey with pure white axillaries but the most striking feature of the teal is the black speculum, with a broad white band on the leading edge and a narrower white trailing edge.

The teal rarely swims, preferring to wade in the shallows. This habit and the distinctive black and white wing make it unique amongst Africa's wildfowl.



Bernier's Teal *Anas bernieri*, Lac Bemamba, Madagascar
(top: Roger Safford, bottom: H G Young)

Sarcelle de Bernier *Anas bernieri*, Lac Bemamba, Madagascar
(en haut: Roger Safford, en bas: H G Young)

Where to see the Madagascar Teal

The best known sites for the teal are still undoubtedly the lakes around Ambereny. It is, however, very difficult to visit this area, since there are no real roads and almost no motor vehicles. It is possible to fly from the capital city Antananarivo to Antsalova, which has no hotels, and walk the 60+ km south to Bemamba. Food must be carried but guides, porters and an ox-cart can be arranged in Antsalova. Tents must be used, water will need purifying and mosquitoes are abundant. It is possible to reach the lakes from Morondava but this takes even longer and you will still end up walking.



Map 2
Carte 2



Map 3
Carte 3

Madagascar Teal have been seen at a reservoir, Lac Amboromalandy, near Mahajanga (O Langrand and S Harrap, pers comm). This lake can be seen from the road from Antananarivo to Mahajanga, lying about 90 km south of the latter town. The road is driveable but transport must be rented. Several visiting bird groups have seen the teal at this site.

Acknowledgements

Fieldwork in Madagascar was funded by the Jersey Wildlife Preservation Trust which has a programme to conserve this species. I would also like to thank the Wildfowl and Wetlands Trust, The Peregrine Fund, UNESCO, Directions des Eaux et Forêts, Ministère des Universités, in Madagascar and British Airways Assisting Nature Conservation.

I was helped in the field by many people but would most like to thank François Busson, Kevin Duffy, Andy Green, Frank Hawkins, Richard Lewis, Rivo Rabarisoa, Patrice Ravonjariisoa and Roger Safford.

None of my work in Madagascar would have been possible without the kind help of Olivier Langrand.

References

1. Rand, A.L. 1936. The distribution of habitats of Madagascar birds. Summary of field notes on the Mission Zoologique Franco-Anglo-Américaine à Madagascar. *Bull. Am. Mus. Nat. Hist.* 72: 143-499.
2. Delacour, J. 1956. *The Waterfowl of the World*. Vol 2. London: Country Life.
3. Salvan, J. 1970. Remarques sur l'évolution de l'avifaune Malgache depuis 1945. *Alauda* 38: 191-203.
4. Andriamanampianina, J.M. 1975. Madagascar. In M. Smart (ed) *Proceedings: International Conference on the Conservation of Wetlands and Waterfowl*, Heiligenhafen, FRG, 2-6 Dec 1974: 125-126. Slimbridge: IWRB.
5. Scott, D. and Lubbock, J. 1974. Preliminary observations on waterfowl in western Madagascar. *Wildfowl* 25: 117-120.
6. Young, H.G., Safford, R., Green, A., Ravonjariisoa, P. and Rabarisoa, R.G.M. 1993. Survey and capture of the Madagascar Teal *Anas bernieri* at Lac Bemamba Madagascar July - August 1992, July 1993. *Dodo, J. Wildl. Preserv. Trusts* 29: 77-94.
7. Safford, R.J. 1993 The Madagascar Teal *Anas bernieri*: a Preliminary survey from Antsalova to Morondava. *Dodo, J. Wildl. Preserv. Trusts* 29: 95-102.
8. Collar, N.J., Crosby, M.J. and Stattersfield, A.J. 1994. *Birds to Watch 2: the world list of threatened birds*. Cambridge: BirdLife International.
9. Cheke, A.S. 1987. An ecological history of the Mascarene islands, with particular reference to extinctions and introductions of land vertebrates. In A.W. Diamond (ed) *Studies of Mascarene Island Birds*: 5-89. Cambridge: Cambridge University Press.

Bird Department, Jersey Wildlife Preservation Trust, Les Augrès Manor, Trinity, Jersey JE3 5BP